



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/035,509

10/25/2001

Tomoo Morohashi

N&H Case 422

3110

7590

08/24/2005

FLYNN, THIEL, BOUTELL & TANIS, P.C.

2026 Rambling Road

Kalamazoo, MI 49008-1699

EXAMINER

GREY, CHRISTOPHER P

ART UNIT

PAPER NUMBER

2667

DATE MAILED: 08/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/035,509

Applicant(s)

MOROHASHI ET AL.

Examiner

Christopher P. Grey

Art Unit

2667

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 October 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

1. Claim 1 is rejected under 35 U.S.C. 112 second paragraph

Regarding claim 1, the phrase "hypothetically" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Auerbach et al. (US 5355371), hereinafter referred to as 'Auerbach', in view of Hameleers et al. (US 6377799), hereinafter referred to as 'Hameleers'.

Claim 1 Auerbach discloses means for constructing a plurality of connection communication passages having a logical tree structure that connects each communication node on the communication passages (Col 4 lines 43-57 and Col 6 lines 38-62 and Col 7 lines 49-52).

Auerbach discloses means for notifying all the communication nodes of the information relating to the constructed connection communication passages (Col 8 lines 40-50).

Auerbach discloses means for controlling communications traffics allotted to the plurality of connection communication passages and changing allotment conditions of communication traffics among the connection communication passages (Col 7 line 53-Col 8 line 12).

Auerbach discloses means for receiving the information relating to disable or enable status change from the communication node (Col 8 line 65-Col 9 line 22 and Col 2 line 54-Col 3 line 29).

Art Unit: 2667

Auerbach does not specifically disclose a means for terminating the communication processing inside the access network and executing a gateway function with an outside network.

Hameleers discloses utilizing an Internet protocol shared interworking function (IPSIWF) as a logical node within a network. Hameleers discloses the IPSIWF terminating a network protocol, and forwarding payload data to a media gateway (Col 2 lines 57-Col 3 lines 5).

It would have been obvious to one of the ordinary skill in the art at the time of the invention to combine the tree leader as disclosed by Auerbach, with the IPSIWF as disclosed by Hameleers by coupling both units. The motivation for this modification is to allow a network to support a network outside the existing network applying a different protocol (Col 2 lines 57-Col 3 lines 5).

Claim 2 Auerbach discloses a means for judging the disable or enable status of a communication link passage connected to it (Col 3 lines 17-29 and Col 8 lines 51-Col 9 line 28).

Auerbach discloses a means for notifying the terminating set (tree leader) of the judgment result (Col 3 lines 17-29 and Col 8 lines 51-Col 9 line 28).

Auerbach discloses a means for receiving the information relating to the connection communication passages notified from the access network terminating set and adapting it as the route information (Col 9 lines 58-Col 10 line 6 and Col 8 line 39-50).

Art Unit: 2667

3. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Auerbach et al. (US 5355371), hereinafter referred to as 'Auerbach', in view of Hameleers et al. (US 6377799), hereinafter referred to as 'Hameleers' in further view of Finn et al. (US 6728205), hereinafter referred to as 'Finn'.

Claim 3 Auerbach discloses a number of switching nodes interconnected within a network (Col 1 lines 32-45).

Auerbach does not specifically disclose the communication node comprising means for performing independently the switching of the connection communication passages when the disable or enable status of the communication link passages has changed.

Finn discloses within a node, an automatic protection system (APS) for receiving information of the availability of links and nodes (failures, faults etc.) as disclosed in Col 15 lines 14-42 and element 14 in fig 1

Finn also discloses a protection-switching module within each node for performing switching in the event of a fault (Col 15 lines 57-Col 16 line 11 and element 18 in fig 1).

It would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the combined teachings of Auerbach and Finn, with the APS and protection-switching module as disclosed by Finn, within each node. The motivation for this modification is to perform rapid network functionality (Col 2 lines 58-Col 3 line 7).

***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

(a) Meier (US 2003/00910014) discloses a number of base stations arranged into a spanning tree within a network communicating with a host computer through a gateway.

(b) Hirst (US 6581166) discloses a method for network fault detection and recovery using a gateway.

(c) Frouin discloses a system for allocating passband for the transmission of data over a network.

Art Unit: 2667

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher P. Grey whose telephone number is (571)272-3160. The examiner can normally be reached on 6:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on (571)272-3179. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Christopher Grey  
Examiner  
Art Unit 2667

*C. Grey*  
8/17/05

*Chi Pham*  
CHI PHAM  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2667 8/19/05